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Agricultural Memorandum No. 444

Erisyphe Spores in London - Effect of Maximum Temperature

L P Smith

Using the results of Ag Mem 443, adjusting for wind direction (weighting NW'ly days by 0.75) and for midday wind speed as follows:

Speed	Weighting	Speed	Weighting
0	1.5	9-16	0.9
1	1.4	17	1
2	1.3	18	1.15
3	1.2	19	1.3
4	1.15	20	1.5
5	1.1	Above 20	2
6	1.05		
7	1		
8	0.95		

The daily mean catches (for SW & NW) were ranged against day maximum temperature with the following mean results.

Temperature Range (°C)	Mean Catch
14-16	18
15-17	19
16-18	23
17-19	23
18-20	27
19-21	29
20-22	33
21-23	37
22-24	41
23-25	43
24-26	38
25-27	31

This suggests a slow increase of catch with maximum temperature over the range 14-20°C - a more rapid increase over the range 20-23.5°C and thereafter a decrease. The maximum temperature at the optimum, ie 23.5°C (74°f) compares well with previous findings at Wellesbourne.

Any comments or suggestions on this paper should be referred to the author.

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